

Amendments to the Specification

Please amend the second full paragraph on page 2 of the application as originally filed as follows:

H4
Multipiece cores providing for the absorbent characteristics of the Young et al. '345 patent in a preferred configuration are disclosed in ~~the commonly assigned, co-pending application entitled Shaped Absorbent Cores Comprising Multiple Pieces of Absorbent Material and Method for Making Same~~, U.S. Patent 5,906,602 to Weber et al. ~~Application Serial No. 08/833,015 Attorney Docket No. 6562 filed March 27, 1997 in the names of Gerald Martin Weber, Gerald Alfred Young, Gregory Wade Taylor, and Gary Dean LaVen.~~ Weber et al. discloses shaped absorbent cores comprising a front panel and a back panel. The front and back panels are in fluid communication with a center section. Preferably the center section comprises material generally suitable for fluid acquisition/distribution, while the front and back panels comprise material generally suitable for fluid storage/redistribution.

Please amend the Summary of the Invention section of the specification as follows:

H2
The present invention relates to disposable absorbent articles suitable for absorbing and retaining aqueous body fluids. The absorbent article comprises at least one removable absorbent core component, a first waist region, a second waist region, and a crotch region positioned between the first waist region and the second waist region. The absorbent article further comprises: (a) a backsheet joined to a fluid pervious topsheet, the backsheet comprising a web; and (b) an absorbent core disposed between the topsheet and the backsheet, the absorbent core comprising a non-removable first absorbent core component disposed in at least the crotch region and at least one removable second absorbent core component removably disposed in the first waist region and in fluid communication with the first absorbent core component; wherein the backsheet further comprises first access means for providing access to the removable second absorbent core component through the backsheet so that the removable second absorbent core component may be removed from the absorbent article through the backsheet without having to remove the absorbent article from a wearer, the first access means comprising a first discontinuity being positioned in the first waist region, a first recloseable flap secured over the first discontinuity, and a first fastener for recloseably joining the first flap to the backsheet.

Please amend the second paragraph of the Detailed Description section of the specification on page 6 of the application as amended in the previous response as follows:

H3 The term "disposable" is used herein to describe absorbent articles which are not intended to be laundered or otherwise restored or reused as an absorbent article, i.e., that are intended to be discarded after a single use and, preferably, to be recycled, composted or otherwise disposed of in an environmentally compatible manner. Note that, as described in this disclosure, a single use of a main structure and a non-removable absorbent core component may correspond to several uses and replacements of replaceable absorbent core components. However, each element is intended to be discarded after having been once wetted by bodily fluids and removed from the wearer's body, rather than being restored and reapplied to the wearer's body.

Please delete and replace the first full paragraph on page 6 of the application as originally filed with the following rewritten paragraph:

H4 FIG. 1 shows in perspective a partially segmented illustration of an embodiment of an absorbent article 60 according to the present invention. The multipiece absorbent core 10 comprising multiple absorbent core components, such as center section 50, front panel 20, and back panel 30, is more fully illustrated and described below with reference to FIG. 9. The multipiece absorbent core 10 is also fully disclosed in ~~the commonly assigned, co-pending application entitled Shaped Absorbent Cores Comprising Multiple Pieces of Absorbent Material and Method for Making Same, U.S. Patent 5,906,602 to Weber et al. Application Serial No. 08/833,015 Attorney Docket No. 6562 filed March 27, 1997 in the names of Gerald Martin Weber, Gerald Alfred Young, Gregory Wade Taylor, and Gary Dean LaVon, which is hereby incorporated herein by reference.~~

Please add the following two paragraphs immediately before the paragraph beginning with "Disposable diaper 60 is shown..." on page 12 at line 24 of the specification as originally filed:

H5 In the incorporated references, the entire absorbent core is typically non-removably disposed in the absorbent article. However, as described throughout this disclosure, specific components of the multi-piece absorbent core are removable and replaceable in absorbent articles of the present invention. For instance, the front panel 20 and/or the back panel 30 may be removable and replaceable, while another component, such as the center section 50, may be non-removably disposed in any of the previously known configurations (and thereby be made non-

removable from the absorbent article.) Thus, absorbent articles of the present invention have both non-removable absorbent core components and absorbent core components that are removable and replaceable.

H5
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(As described in the incorporated references, components of the absorbent core may be made non-removable from the chassis by being secured, attached, affixed, and/or sandwiched to or in the chassis. For example, as described in the Buell '003 patent, an absorbent core component can be rendered immobile by, for example, bonding the backsheet and the absorbent core component together, bonding the absorbent core component to a topsheet and the topsheet to the backsheet, or tightly sandwiching the absorbent core component between a topsheet and the backsheet. Also, as described in the Lawson '278 patent, an absorbent core component may be superimposed on the backsheet and attached thereto by attachment means such as those well known in the art. For example, the absorbent core component may be secured to the backsheet by a uniform continuous layer of adhesive, a patterned layer of adhesive, or an array of separate lines or spots of adhesive. In some exemplary embodiments, an absorbent core component may be affixed in the crotch area of the chassis, as described in the DesMarais et al. '345 patent. Similarly, as described in the Osborn '264 patent, an absorbent core component may be attached over the core's upper or lower major surfaces, respectively, to adjacent members such as the topsheet and the backsheet by any of the means well known in the art, such as by spray-gluing or lines or spots of adhesive.)

Please amend the three full paragraphs on page 7 of the specification as previously amended as follows:

H6
A third benefit resulting from the multipiece absorbent core when used in an absorbent article of the present invention is the capability of removing and/or replacing core components of the absorbent core to regenerate the storage/redistribution capacity of the absorbent core 10. As shown in FIG. 1, a discontinuity in backsheet 62 forms ~~opening 41~~ aperture 44 and provides access to the absorbent core components, for example, back panel 30; therefore allowing for removal or replacement of absorbent core components. FIG. 2 shows in partial cross-section the absorbent article embodiment shown in perspective in FIG. 1. Additional description of a representative disposable diaper in accordance with the present invention is disclosed below with reference to FIG 9.

In FIGs. 1 and 2, the absorbent core 10 is shown with one layer of center section 50 and one layer of front and back panels, 20 and 30. Since center section 50 and back panel 30 are discrete absorbent components, back panel 30 is removable from the absorbent article 60 through ~~opening 41~~ aperture 44. Once back panel 30 becomes saturated with bodily discharges, such as urine, it can be removed and replaced with a fresh back panel for continued use of the absorbent article.

H6
As shown in FIGs. 1 and 2, when disposable diaper 60 is being worn, flap 42 may be secured over ~~opening 41~~ aperture 44 by suitable fasteners 43, such as VELCRO strips or adhesive strips (not shown). More preferably, flaps 42 are sealed with releasable adhesive, thereby providing for fluid impermeability when closed, but allowing for multiple openings and closings. ~~Opening 41~~ Aperture 44 forms what may be described as a pocket or pouch, with absorbent core components, for example, back panel 30 being removable and replaceable through the pocket. As shown in FIGs. 1 and 2, to remove back panel 30, flap 42 is lifted, and back panel 30 is extracted out of the absorbent article through ~~opening 41~~ aperture 44. To replace back panel 30, a fresh, dry absorbent component may be reinserted through backsheet 62 through ~~opening 41~~ aperture 44. FIG. 2 shows flap 42 in the closed position over ~~opening 41~~ aperture 44 corresponding to front panel 20 (shown in FIG. 1). In general, front panel 20, back panel 30, and corresponding ~~openings 41~~ apertures 44 and flaps 42 are substantially similar, but need not be. In an alternative embodiment, it may only be desired to include one ~~opening 41~~ aperture 44 and flap 42, for example, for access to back panel 30.

Please amend the second full paragraph on page 8 of the specification as originally filed as follows:

H7
Back flap 42 is reclosable and preferably resealable, and is preferably positioned so that as flap 42 is secured in a closed position a back panel member, e.g., back panel member 35, is urged into fluid communication with center section 50. ~~FIG. 4 shows flap 42 in the closed and sealed position over opening 41 corresponding to front panel 20 (shown in FIG. 1). In general, front panel 20, back panel 30, and corresponding openings 41 and flaps 42 are substantially similar, but need not be. In an alternative embodiment, it may only be desired to include one opening 41 and flap 42, for example, for access to back panel 30.~~

Please amend the first full paragraph on page 12 of the specification as previously amended as follows:

H8
As shown in FIG. 10, the backsheet **62** of an embodiment of an absorbent article of the present invention is generally made of substantially liquid impervious material, but it is not continuous. In particular, a discontinuity in backsheet **62** forms an ~~opening 41~~ aperture 44 which makes backsheet **62** liquid pervious in the area of ~~opening 41~~ aperture 44. Adjacent backsheet **62** is disposed an absorbent core **10** which may itself comprise one or more absorbent components in distinct layers. Adjacent absorbent core **10** and preferably joined to the backsheet is a fluid pervious topsheet **61**. Preferably, topsheet **61** and backsheet **62** are joined directly at the absorbent article's periphery by adhesive or other attachment means known in the art. Topsheet **61** may also be adhered to the absorbent core. It is also contemplated that topsheet **61** may be unitary with one or more absorbent core components, thereby essentially reducing the absorbent article to two basic structural components: an absorbent core having core components with an integral topsheet, and a backsheet.

Please amend the third full paragraph on page 15 of the specification as originally filed as follows:

H9
In use, the diaper **60** is applied to a wearer by positioning one waistband region under the wearer's back, and drawing the remainder of the diaper **60** between the wearer's legs so that the other waistband region is positioned across the front of the wearer. The tape-tab **65** or other fasteners are then secured preferably to outwardly facing areas of the diaper **60**, as ~~show~~ shown in FIG. 2 and 4, for example. In use, the disposable diapers or other absorbent articles of the present invention tend to more quickly and efficiently distribute and store liquids and to remain dry due to the high absorbent capacity of the fluid absorbent members. Disposable diapers incorporating the fluid absorbent members of the present invention can also be thinner and more flexible.

Please amend the paragraph beginning on page 24 at line 25 and the immediately following two paragraphs of the specification as originally filed as follows:

H10
A preferred method of making the shaped absorbent core suitable for use with the present invention is now described with reference to FIGs. 14-19. FIG. 14 schematically shows a

representative apparatus **70** suitable for accomplishing the method of forming the absorbent core components of the preferred embodiment of the present invention as depicted in FIG. ~~4~~ 10. The method depicted in FIG. 14 and described in detail below can be easily modified to produce absorbent cores comprising different combinations and placement of absorbent members, such as those depicted in FIGs. 12 and 13. Representative modifications are shown schematically in FIG. 15 and, unless otherwise disclosed, can be understood with reference to the description of the method of FIG. 14 since like numerals identify like elements. The method is not limited to nonwoven web materials or absorbent polymeric foam materials, but is suitable for use with any generally absorbent material formed into webs, either nonwoven or woven, fibrous or polymeric, as known in the art that may be supplied on rollstock and have sufficient integrity to be processed by the method disclosed.

H10
A first relatively narrow rectilinear web **81** is unwound from a supply roll **71**. Web **81** has a width generally corresponding to width **53** of the generally rectilinear center section **50**, as shown in FIGs. 1, 3, 9 and 10. Web **81** comprises a material suitable for use as an acquisition/distribution layer ~~54~~ 52 of the preferred embodiment as shown in FIGs. 9 and 10. Web **81** is guided through entry point **100** onto a conveyor **102** where it is positioned for further processing as described below.

In a preferred embodiment, second and third relatively narrow rectilinear webs **82** and **83**, comprised of a material suitable for acquisition/distribution or storage/redistribution of aqueous fluid, are unwound from supply rolls **72** and **73**, respectively. Webs **82** and **83** correspond to storage/redistribution layers ~~52~~ 51 of FIGs. 9 and 10 and may have a width generally corresponding to width **53** of the center section **50**. Webs **82** and **83** are guided through entry point **100** onto a conveyor **102** where they are positioned in layers upon web **81** for further processing as described below.

Please delete the second full paragraph on page 27 of the specification as originally filed without replacement.

Please delete and replace the entire Abstract with the following newly written Abstract:

H11
Disposable absorbent article suitable for absorbing and retaining aqueous body fluids including a substantially fluid impervious backsheet having a discontinuity therein and an absorbent core between the backsheet and a topsheet. The absorbent core includes a non-

removable component and a removable and replaceable component, with access for its removal provided by the discontinuity in the backsheet, in fluid communication with the non-removable component. The replaceable absorbent core component may be removed and a like component may be substituted in place of the removed component without removal of the absorbent article from the wearer.

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